

Exacting Standards, Just Like Yours, since 1948

SRM60/SRM80

Swing Ring Series

SRM60/SRM80 PLANETARY MIXERS

Maintenance & Parts Manual



Persons under the age of 18 are not permitted to operate or have accessibility to operate this equipment per U.S. Dept. of Labor Employment Standards Administration Fact Sheet No. ESA91-3.

Welcome to Univex

Thank you for purchasing this Univex product.

Your new SRM60+/SRM80+ Mixer has been designed with advanced performance and safety features that make it an excellent addition to your food preparation equipment. Like all Univex mixers, slicers, meat grinders and accessories, this mixer is engineered to provide years of reliable service.

If you have any questions concerning the operation of this unit, or if we can be of further assistance, please call our Customer Service Department.

Univex Customer Service:
USA & Canada 800-256-6358 • International 603-893-6191

Safety is our Top Priority

READ AND MAKE SURE THAT YOU UNDERSTAND THE INSTRUCTIONS AND SAFETY WARNINGS IN THIS BOOKLET BEFORE ATTEMPTING TO OPERATE THE MIXER OR ATTACHMENTS.

NEVER PUT FINGERS OR HANDS IN THE BOWL WHILE THE MIXER IS OPERATING OR SERIOUS INJURY COULD RESULT.

NEVER ATTEMPT TO CLEAR A JAMMED ATTACHMENT OR STALLED MIXER WITHOUT SHUTTING THE POWER OFF.
DISCONNECT THE ELECTRICAL PLUG FROM ELECTRICAL OUTLET.

ALWAYS REPLACE THE POWER TAKE-OFF (PTO) CAP WHEN ATTACHMENTS ARE NOT IN USE.

DO NOT OPERATE THIS MIXER WITHOUT THE BOWL IN PLACE

WARRANTY

The Univex SRM60+/SRM80+ Mixer is warranted by Univex Corporation against defects in materials and workmanship for a period of one year from date of delivery if delivered to a destination in the United States or Canada.

Contact Univex Customer Service to report any warranty claim. Univex shall not be liable for any consequential, compensatory, incidental, or special damages. damages incurred in transit or from installation error, accident, alteration, or misuse are not covered. Transit damages should be reported to the carrier immediately.

If the SRM60+/SRM80+ Mixer is delivered to a country other then the United States or Canada, it is warranted by Univex's authorized distributor. Contact your distributor directly to report any warranty claims outside of the United States or Canada.

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CHOOSING THE RIGHT LOCATION FOR YOUR NEW MIXER.

When selecting the best location for the mixer, it is helpful to consider the following:

- Where is the best location for the operator, both for saving steps and easy viewing?
- · Is this a good location for product flow as in:
 - · Easy to get ingredients to the mixer?
 - Destination of the mix after mixing?
 - · Is there existing electrical service at this location?
 - · Does this location provide easy access for cleaning and service?
 - Check to be sure that your mixer with attachments does not extend out into heavy traffic areas.
 - If stands and/or portable equipment are used along side of your mixer, can they be moved easily to and from your mixer?
- If unit is not provided with a plug, then the unit is to be fitted with a primary disconnect device that has a contact separation of at least 3mm in all poles.

IMPORTANT ELECTRICAL SERVICE INFORMATION

Electrical wiring instructions are found in the wiring diagram (Figures 12A thru 12C). Before making electrical connections, CHECK the specifications on the nameplate to make sure that they agree with those on your electric service.

USER-FRIENDLY SWING RING™ SAFETY GUARD

Your SRM60+/SRM80+ Mixer features a newly updated, 2-part safety guard. The Swing Ring™ Safety Guard ring is easily be removed and installed, as well as dishwasher safe. It conveniently swings out of the way without having to be removed to place or sample ingredients in the bowl. Only one side of the guard needs to be open when adding ingredients. You'll find this two-piece design is easy to handle and fits conveniently in your sink or dishwasher. It also provides a clear view of the product throughout the mixing cycle.

This mixer will not operate unless the Swing RingTM Safety Guard is properly engaged. Metal tabs at the rear of the guard activate twin switches that enable the mixer to run only when the guard is securely closed. These switches protect against accidental operation of the mixer when the safety guard is open or removed from the mixer. The mixer will automatically stop if the guard is open. Additional switches in the bowl slide mechanism automatically stop the mixer if the bowl is lowered from the "up" (mixing) position.

To install the Swing RingTM Safety Guard, insert the pointed end of the rod at the rear of the guard into the lower mounting bracket on the mixer housing. Then insert the top end of the rod into the upper bracket by aligning the groove in the rod with the slot in the bracket. Press the rod in and allow it to drop

down into position. Repeat this for each of the two sections of the guard. Swing the two halves of the guard forward. When the guard is properly closed, the switches are now activated and the mixer can be operated.

To remove the guard, simply reverse the installation procedure. Grip the two halves of the guard and pull it open. Use an upward motion to release each half of the guard from the bracket on the machine body.

To open the guard for access to the bowl, first turn the mixer off by pushing the red stop button (Fig.1 [12]). Pull open the two halves of the guard and swing one or both outward. It is not necessary to remove them. Close the guard to resume mixing operations.

OPERATING THE SRM30+ MIXER

Your Univex Mixer is designed to meet the cook's and Baker's demand for an efficient, dependable appliance. It should give unfailing performance over a period of years when operated and maintained according to the instructions contained herein.

The mixer drives various agitator attachments through a beater head shaft to beat, mix, or whip liquid, viscous, or dry ingredients. The shaft is driven by a sturdy motor whose power is transmitted by a rugged, cogged belt and a Continuously Variable Transmission (CVT) through a gear train and a planetary gear set. The speed of the beater shaft can be varied from approximately 60 to 270 revolution per minute (rpm) for SRM80+ and 75 to 340rpm for SRM60+. (See page 10 & 11 for part numbers of various agitators, attachments and accessories.)

The SRM60+/SRM80+ Mixer is equipped with a power take-off (PTO) that operates other attachments such as slicers, graters and grinders. The PTO speed can be varied from 85 to 385 rpm for SRM80+ and SRM60+. Be sure to read and follow any safety instructions provided by the manufacturers of attachments that you operate on the PTO. The PTO hub should be covered with the PTO cap provided with your mixer when in use.

Warning---Never put hands, spoons, utensils or other objects into the bowl while the mixer is operating!

Note: Noise emissions are below 70db (A).

Securing the Bowl & Installing the Mixer Agitator.

Place the bowl on the bowl support (Fig. 1 [15]). The indentation on the rim of the bowl must align with the corresponding pin on the mixer housing. Align the holes on eighter side of the bowl rim over the pins on the bowl support and lower the bowl into position. Secure the bowl by turning the bowl clamps (Fig. 1 [16]).

With the bowl in the "down" position, install the desired agitator by sliding it upward onto the beater shaft (Fig. 1 [1]). Rotate the agitator counter-clockwise until it is engaged.

Safety Note Serious injury may result if the bowl is not fully secured to the bowl support using the bowl support pins and firmly closing the clamps.

With the bowl secured, add ingredients. Liquids should be added first. The bowl is now ready to be raised to the "up" (mixing) position by turning the bowl lift handle (Fig. 1[13]) clockwise.

When using the wire whip agitator, raise the bowl to the "up" position first and then add ingredients to avoid wire whip damage.

Secure and close the Swing Ring™ Safety Guard before proceeding.

Using the Bowl Lift

The mixer will not operate unless the bowl is in the "up" position. Raise the bowl by turning the bowl lift handle (Fig. 1 [13]) clockwise. To lower the bowl, turn the handle counter-clockwise. If your mixer is equipped with the power bowl lift option (instead of the handle) turn the power bowl lift switch clockwise to raise the bowl, counter-clockwise to lower the bowl.

It is necessary to lower the bowl to change the agitator. This also makes the bowl accessible for filling

Setting the Timer - Start/Stop Controls

This mixer will not operate unless the timer has been set to a specified number of minutes or set in the "HOLD" position. To start the mixer, first turn the timer dial (Fig. 1 [8]) to the desired mixing time. Then push the start button (Fig. 1 [11]). The mixer will automatically stop when the timer reaches "0". To stop mixing before the timer reaches "0", push the red stop button (Fig. 1 [12]).

The timer may be set for up to 15 minutes of mixing, or may be set to the "HOLD" position for continuous operation. When setting a time of less then 5 minutes, turn the dial beyond 5 minutes and then return it to the desired time.

Safety Note The mixer will start only when the Swing Ring™Safety Guard is engaged and the bowl is in the raised position. Do not operate the mixer without the bowl in place.

Manual Stop Button

For safety and operational ease, this mixer is equipped with a stop button (Fig.1 [12]) that has an oversized, red mushroom-style cap.

Safety Note Although the motor shuts off instantly when the Swing Ring™ Safety Guard is opened, or the bowl is lowered, or the stop button is pushed, the agitator may not come to complete rest for several revolutions. Do not put hands or utensils into bowl or near the beater shaft until it is stopped.

Both the start button and stop button are momentary contact type. They provide low voltage protection and prevent accidental start-up in the event of power interruption.

Vari-Speed Control

A major advantage of Univex mixers is their Continuously Variable Transmission (CVT). Unlike other mixers, CVT lets you **change speed while the mixer is running**. Change speed by moving the speed control lever (Fig. 1 [9]) to the desired level. The speed indicator (Fig. 1 [10]) shows four speeds. Numerous intermediate speeds give the Cook or Backer tremendous flexibility.

Use speed 1 (slow) for heavy mixtures like pizza, bread or roll dough. Speed 1 should also be used with the Meat and Food Chopper attachment. For most mixing tasks, start on speed 1 and progress to higher speeds as needed. Use high speeds for wipping cream, beating eggs, and thin batter. To avoid damaging your mixer, follow the speed, volume limits and attachments recommendations shown in the Table of Mixing Capacities on page 8 & 9.

If you notice any slippage during mixing, the mixer may be overloaded. Reduce the load, or reduce speed until mixing action is smooth. Refer to the Trouble- Shooting Guide on page 14 & 15.

If the mixer jams and the motor stalls, immediately press the stop button. Take necessary steps to reduce the load. Never put hands in the bowl to clear a jam.

Note Always return to speed 1 before shutting off the mixer. Do not move the speed control lever when the mixer is not running, because this will cause belt to become loose and the mixer will not operate properly.

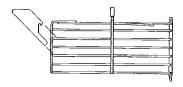
If the mixer has been shut off by the timer, or stop button in speed 2, 3 or 4, follow these steps to avoid belt slippage or jerky start: Empty the bowl. Set the timer to "HOLD". Press the start button. As the mixer begins to operate, move the speed control lever back to speed 1. Press the stop button. Return to "0". Your mixer is now ready for it's next task.

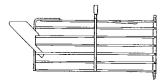
Using the Ingredients Chute

The ingredients chute provided with your mixer enables you to add ingredients to the bowl while the mixer is running, and without opening or removing the Swing Ring™ Safety Guard. The chute may be installed on the front or side of either half of the guard. See below. Once the chute is properly installed, it can remain in place permanently. if desired.

Ingredients Chute Installation

Slide the bottom of the chute between horizontal safety guard rings and engage the chute onto the safety guard.





Bowl Dollies & Adapter

Dollies (Page 10 & 11 [h]), simplify moving large, heavy batches to the next location. To use 40 for 80 bowl or 30 for 60 bowl with the dolly, you must use a bowl adapter (Page 10 & 11 [i]). To remove heavy batches from the mixer, first place the dolly under the bowl. Then open the bowl clamps and lower the bowl to the dolly. Be sure the bowl support pins clear the bowl mounting brackets before moving the bowl and dolly.

Using Smaller Bowl

For maximum flexibility, an alternative 30 for 60 quart bowl is available for use on your SRM60+ Mixer, and a 40 for 80 and 60 for 80 for use on your SRM80+ Mixer. Specially sized agitators must be used. See page 10 & 11 for part numbers.

Splash/Extension Ring

A splash/extension ring (page 10 & 11 [j]) mounted to the bowl helps confine ingredients during the mixing of certain recipes. The ring should **never be used to overload** a mixer beyond its recommended capacity. Consult the Table of Mixing Capacities on page 8 & 9 when you are unsure of appropriate loads.

USING THE POWER TAKE-OFF (PTO)

The power take-off hub (Fig. 1[5]) accommodates #12 tapered attachments such as a Vegetable Slicer and Shredder, or a Meat and Food Chopper. The mixer's speed control lever also controls the PTO drive speed.

Before installing attachments, turn the mixer off. Remove the PTO cap and loosen the thumb screw (Fig. 1 [6]) on the PTO hub. Insert the attachment with a slight twist until firmly in place. Tighten the thumb screw. Be sure to read and follow any safety instructions provided for attachments that you operate on the PTO.

Safety Notes

When grinding meat, chopper attachments must never run faster then speed 1. For vegetables, attachments may run at higher speed.

Always turn the mixer off to install or remove attachments.

Always return to speed 1 before shutting off mixer.

Cover the PTO hub with the PTO cap when not in use.

SRM60+ Table of Mixing Capacities & Recommended Agitators

| | T | | |
|---|---|-------------------|---------------------|
| MODEL | | SRM60+ | |
| Bowl Capacity | | 72 qt | 68.1 L |
| Attachment Hub Size | | #12 | 00.1 L |
| Motor | <u> </u> | 3 hp | |
| Kitchen Capacities (single batches) | Agitator(s) | | ···· |
| baccics) | | | |
| Mashed potatoes | Batter beater, 4-wing beater | 40 lb | 18.2 kg |
| Whipping cream | Wire whip, 4-wing beater | 12 at | 11.4 L |
| Mayonnaise | Batter beater, wire whip, | 18 qt (oil) | 17 L (oil) |
| | 4-wing beater | 1 | - () |
| Egg whites | Wire whip | 2 | 1.9 L |
| Meringue | Wire whip | 11/2 qt (water) | 1.4 L (water) |
| Waffle or pancake batter | Batter beater | 24 qt | 22.7 L |
| Bakery Capacities (single | | | |
| batches) | Agitator(s) | <u> </u> | |
| Pie dough | Productivites | 50.11 | |
| Cake | Pastry knife | 50 lb | 22.7 kg |
| Short sponge cake | Batter beater, 4-wing beater Wire whip, 4-wing beater | 50 lb | 22.7 kg |
| Sponge cake batter | Wire whip, 4-wing beater Wire whip, 4-wing beater | 45 lb 36 lb | 20.5 kg |
| Angle food batter (8-10 oz | Wire whip, 4-wing beater Wire whip, 4-wing beater | 35 ID 45 cakes | 16.4 kg 45 cakes |
| cake) | whe winp, 4-wing beater | 45 cakes | 43 cakes |
| Marshmallow icing | 4-wing beater | 5 lb | 2.3 kg |
| Fondant icing | Batter beater | 36 lb | 16.4 kg |
| Shortening & sugar creamed | Batter beater | 48 lb | 21.8 kg |
| Egg & sugar for sponge cake | Batter beater, 4-wing beater | 24 lb | 10.9 kg |
| Use only speed 1 for: Pizza dough | | | |
| thin, 40% AR | Dough hook | 40 lb | 18.2 kg |
| medium, 50% AR | Dough hook | 75 lb | 34.1 kg |
| thick, 60% AR | Dough hook | 80 lb | 36.4 kg |
| Use speed 1 or 2 for: Bread/roll dough | _ | | |
| Heavy, 55% AR | Dough hook | 80 lb | 36.4 kg |
| Light to med. 60% AR | Dough hook | 80 lb | 36.4 kg |
| Raised doughnut dough 65% AR | Dough hook | 50 lb | 22.8 kg |

NOTES: Recommended speeds are for the capacities listed. For larger capacities, reduce speed. Dough capacity, whether for bread, rolls, pizza, bagels or doughnuts, is based on 12% flour moisture and 70°F (21°C) water temperature. Reduce capacity if cold water is used. If higher gluten flour is used, reduce total capacity by 10%.

AR% (Absorption Ratio) = the weight of the water divided by the

AR% (Absorption Ratio) = the weight of the water divided by the weight of the flour.

The lower the AR% the stiffer and more difficult the dough is to mix. AR% below 40% will reduce total capacity.

1 gallon of water = 8.3 lb. (1 liter of water = 2.21b)

SRM80+ Table of Mixing Capacities & Recommended Agitators

| MODEL | | SRM80+ | |
|--|------------------------------|--------------|--|
| Bowl Capacity | | 90 qt | 85.2 L |
| Attachment Hub Size | | #12 | 03.2 L |
| Motor | | 1 hp | |
| | | | to de transporter de la companya del companya de la companya del companya de la c |
| Kitchen Capacities (single batches) | Agitator(s) | | |
| Mashed potatoes | Batter beater, 4-wing beater | 50 lb | 22.7 kg |
| Whipping cream | Wire whip, 4-wing beater | 16 qt | 15.1 L |
| Mayonnaise | Batter beater, wire whip, | 22 qt (oil) | 20.8 L (oil) |
| | 4-wing beater | 1 (1.2) | |
| Egg whites | Wire whip | 3 qt | 2.8 L |
| Meringue | Wire whip | 2 qt (water) | 1.9 L (water) |
| Waffle or pancake batter | Batter beater | 30 qt | 28.4 L |
| Bakery Capacities (single | | | |
| batches) | Agitator(s) | | |
| | Į. | | |
| Pie dough | Pastry knife | 60 lb | 27.3 kg |
| Cake | Batter beater, 4-wing beater | 60 lb | 27.3 kg |
| Short sponge cake | Wire whip, 4-wing beater | 70 lb | 31.8 kg |
| Sponge cake batter | Wire whip, 4-wing beater | 54 lb | 24.5 kg |
| Angle food batter (8-10 oz cake) | Wire whip, 4-wing beater | 60 cakes | 60cakes |
| Marshmallow icing | 4-wing beater | 6 1/2 lb | 3.0 kg |
| Fondant icing | Batter beater | 45 lb | 20.4 kg |
| Shortening & sugar creamed | Batter beater | 55 lb | 25.0 kg |
| Egg & sugar for sponge cake | Batter beater, 4-wing beater | 36 lb | 16.4 kg |
| Use only speed 1 for: Pizza dough | | | - |
| thin, 40% AR | Dough hook | 40 lb | 18.2 kg |
| medium, 50% AR | Dough hook | 75 lb | 34.1 kg |
| thick, 60% AR | Dough hook | 80 lb | 36.4 kg |
| Use speed 1 or 2 for: Raised doughnut dough | | | |
| 65% AR | Dough hook | 60 lb | 27 .3 kg |
| Bread/roll dough | | | |
| heavy, 55% AR | Dough hook | 80 lb | 36.4 kg |
| light to med., 60% AR | Dough hook | 80 lb | 36.4 kg |

NOTES: Recommended speeds are for the capacities listed. For larger capacities, reduce speed. Dough capacity, whether for bread, rolls, pizza, bagels or doughnuts, is based on 12% flour moisture and 70°F (21°C) water temperature. Reduce capacity if cold water is used. If higher gluten flour is used, reduce total capacity by 10%.

AR% (Absorption Ratio) = the weight of the water divided by the weight of the flour.

The lower the AR% the stiffer and more difficult the dough is to mix. AR% below 40% will reduce total capacity.

1 gallon of water = 8.3 lb. (1 liter of water = 2.21b)

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Beaters, Agitators, Bowls, & Accessories Available for the SRM60+ Mixer

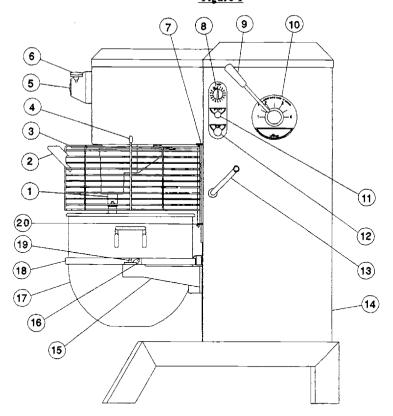
Part numbers (size in quarts)

| Part numbers | (size in quarts) |
|---|---|
| A. Batter Beater 1061083 (60) Optional | G. Bowl 1061192 (60) Optional |
| 1061096 (30 for 60) | 1061105 (30 for 60) |
| B. Wire Whip 1061095 (60) | H. Bowl Dolly |
| Optional 1061182 (30 for 60) | Optional 1061971 (60) 1030971 (30 for 60) |
| C. Dough Hook | I. 30 for 60 Bowl |
| 1061098 (60) | Dolly Adapter |
| Optional 1061090 (30 fer 60) | Optional 1030972 |
| D. Pastry Knife | J Splash/Extension Ring |
| Optional 1061087 (60) 1061088 (30 for 60) | Optional 1061298 (60) 1061299 (30 for 60) |
| E. Four Wing Beater | K. Vegetable Slicer/Grater |
| Optional 1061197 (60) 1061301 (30 for 60) | Optional VS9 1000950 Slicer VS9H 1001050 Grater |
| F Sweet Dough Beater | L Meat & food Chopper |
| Optional 1061229 (60) 1061313 (30 for 60) | Optional ALMFC12 1000550 |
| <u>L</u> | |

Beaters, Agitators, Bowls, & Accessories Available for the SRM80+ Mixer

| Part numbers (size in quarts) | | | |
|-------------------------------|----------------------------|--|--|
| A. Batter Beater | G. Bowl | | |
| 1080020 (80) | 1 | | |
| 1000020 (80) | 1080013 (80) | | |
| 0 | | | |
| Optional | Optional | | |
| 1061096 (40 for 80) | 1080038 (40 for 80) | | |
| 1061083 (60 for 80) | 1080047 (60 for 80) | | |
| | | | |
| | | | |
| | | | |
| B. Wire Whip | H. Bowl Dolly | | |
| 1080033 (80) | II. Down Dolly | | |
| 1000000 (00) | Outional | | |
| Optional | Optional | | |
| f - | 1080971 (80) | | |
| ` , | 1030971 (40 for 80) | | |
| 1061095 (60 for 80) | 1061971 (60 for 80) | | |
| | | | |
| | - | | |
| | | | |
| C. Dough Hook | I. 40 for 80 Bowl | | |
| 1080034 (80) | Dolly Adapter | | |
| | Dony : Mapter | | |
| Optional | Optional | | |
| 1061090 (40 for 80) | 10320972 | | |
| 1061089 (40 for 80) | 10320972 | | |
| 1001089 (60 for 80) | | | |
| İ | | | |
| | | | |
| | | | |
| D. Pastry Knife | J. Splash/Extension Ring | | |
| | ł i | | |
| Optional | Optional | | |
| 1080032 (80) | 1080049 (80) | | |
| 1061088 (40 for 80) | 1061299 (40 for80) | | |
| 1061087 (60 for 80) | 1061298 (60 for 80) | | |
| | (3.2.2.00) | | |
| | | | |
| | | | |
| E. Four Wing Beater | V Vagatabla Sligan/Contain | | |
| 2 Sur 17 mg Dodge | K. Vegetable Slicer/Grater | | |
| Optional | | | |
| | Optional | | |
| 1080036 (80) | VS9 Slicer 1000950 | | |
| 1061301 (40 for 80) | VS9H Grater 1001050 | | |
| 1061197 (60 for 80) | | | |
| | | | |
| | | | |
| | <u> </u> | | |
| F Sweet Dough Beater | L. Meat & Food Chopper | | |
| - | ···· | | |
| Optional | Optional | | |
| 1080031 (80) | ALMFC12 1000550 | | |
| 1061313 (40 for 80) | / 12/VII O12 1000350 | | |
| 1061229 (60 for 80) | | | |
| (00 101 80) | | | |
| | | | |
| | | | |
| l i | | | |

OVERALL VIEW OF FOOD MIXER Figure 1



- 1. BEATER SHAFT
- 2. CHUTE 1000541
- SAFETY RING ASSEMBLY
 SRM60+ 1064550 Right, 1064551 Left
 SRM80+ 1080051 Right, 1080052 Left
- 4. MAGNET
- 5. NO. 12 HUB
- 6. THUMB SCREW
- 7. UPPER MOUNTING BRACKET
- 8. TIMER
- 9. SPEED CONTROL LEVER
- 10. SPEED INDICATOR LABEL

- 11. START BUTTON
- 12. STOP BUTTON
- 13. BOWL LIFT HANDLE
- 14. REAR ACCESS PANEL
- 15. BOWL SUPPORT
- 16. BOWL CLAMP
- 17. BOWL
- 18. BOWL RIM
- 19. BOWL SUPPORT PIN
- 20. LOWER MOUNTING BRACKET

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CLEANING YOUR MIXER

Consistent use of the following procedures will ensure that your mixer is in optimum condition.

- Warning -- Disconnect electric power supply before cleaning.
- Wash the body of the mixer, the bowl support, and beater shaft with warm water and mild soap.
- Avoid excess water in the area of the safety switch that protrude from the housing where the Swing Ring™ Safety Guard is mounted.
- Do not rinse with a hose.
- Do not use abrasive pads.
- Dry the mixer thoroughly using a soft cloth.
- Wash the bowl and beater immediately after use. If egg mixtures or flour batter have been used, rinse the bowl and batter with cold water before washing with hot water. Wash the Swing Ring™ Safety Guard in the same manner, or in your dishwasher.
- Dry bowls, agitators and safety guard thoroughly.

OPERATOR'S PREVENTIVE MAINTENANCE

For best long-term performance, operators should follow these simple practices.

- Lightly lubricate the beater shaft (Fig. 1 [1]) after washing. Petro-Gel or equivalent food grade lubricant should be used.
- Do not cover the unit with a plastic bag, as this traps humidity in your mixer.
- If the electrical supply cord is damaged, it must be replaced by a special cord or assembly available from Univex directly or from a Univex service agent.
- Do not overload the mixer. Overloading is the #1 cause of mixer failure, Follow the Table of Mixing Capacities on page 8 &9. It may be helpful to post a copy of this table adjacent to the mixer.
- Keep the mixer properly lubricated. Lack of lubrication is #2 cause of mixer failure. Key mixer components require lubrication after each 500 hours of operation. (Instructions on frequency and method of lubricating are on page 18).
- Only change speed with the mixer running. Changing speed with mixer off will cause belts to loosen, and the mixer will not turn (see Trouble-Shooting Guide on page 14 & 15). Return to speed 1 before shutting the mixer off. Use the procedure described on page 6 to return the mixer to speed 1 if mixer is shut off in a higher speed.

SRM60+/SRM80+ TROUBLESHOOTING GUIDE

| SK. | M60+/SRM80+ TROUBLESHO | OTING GUIDE |
|---|--|--|
| TROUBLE | POSSIBLE CAUSE | REMEDY |
| l. Mixer will not operate. | 1.1 Timer not turned on. | 1.1 Turn timer on. |
| | 1.2 Burned switch contacts | 1.2 Clean or replace contacts. * |
| | 1.3 Electrical service down. | 1.3 Check electrical service. Replace fuse or reset circuit breaker if necessary. |
| | 1.4 Motor capacitor defective. (1 PH Only) | 1.4 Replace. * |
| | 1.5 Burned out motor. | 1.5 Remove, test, repair or replace. * |
| | 1.6 Magnetic starter tripped due to overload | 1.6 Wait several minutes and push start button |
| | 1.7 SAFETY RING not mounted and closed. | 1.7 Install SAFETY RING. |
| | 1.8 Bowl not raised. | 1.8 Raise bowl completely. |
| 2. Mixer runs but agitator will not turn. | 2.1 Drive belt off pulley | 2.1 Reinstall drive belt on motor pulley and adjust mount center distance. * |
| | 2.2 Key or Pin sheared on input shaft, input gear, bevel pinion, bevel gear, vertical shaft or beater shaft. | 2.2 Locate by step inspection and replace defective part.* |
| | 2.3 Shifting speed with mixer not running. | 2.3 With mixer running, slowly move speed control lever slowly fully forward then backward to re-engage belt |
| Agitator stalls during mixing | 3.1 Mixer bowl is overloaded | 3.1 Adjust contents of bowl per Mixing Capacities Table |
| | 3.2 Speed is set too high for the mix | 3.2 Shift speed lower till action rotates smoothly |
| | 3.3 Loose belt | 3.3 Readjust pulley center distance to tighten belt. * |
| | 3.4 Contamination of belt with grease | 3.4 Clean pulleys and replace belt * |
| 4. Speeds do not change properly | 4.1 Loose belt. | 4.1 Tighten or replace belt. * |
| | 4.2 Vari-Speed pulley inoperative | 4.2 Remove, clean & lubricate, or replace. * |

Page 14

SRM 60+/SRM 80+ TROUBLESHOOTING GUIDE

| 5. Mixer runs, but | 515 | |
|--|---|--|
| repeatedly cuts out and stops | 5.1 Bowl overloaded | 5.1 Adjust contents of bowl per Mixing Capacities Table |
| | 5.2 Speed is set too high for the mix | 5.2 Reduce speed |
| | 5.3 Service voltage too low or fluctuating | 5.3 Check electrical voltage. * |
| | 5.4 Starter improperly set | 5.4 Adjust amp setting on starter. * |
| 6. Attachments contact bottom of bowl. | 6.1 Dented bowl. | 6.1 Remove dent or replace bowl. |
| | 6.2 Bowl height is set too high | 6.2 Reset bowl height. * |
| 7. Attachments contact side of | 7.1 Dented bowl | 7.1 Remove dents or replace bowl |
| bowl | 7.2 Insufficient clearance between bottom of bowl and beater. | 7.2 Adjust bowl height. * |
| 8. Excessive noise. | 8.1 Gears need to be repacked with grease, or oil level is low. | 8.1 Locate source by inspection and repack with grease, or top off oil level. * |
| | 8.2 Badly worn or frayed drive belt. | 8.2 Replace belt. * |
| | 8.3 Attachments hitting bowl | 8.3 Inspect for cause in items 6 and 7 above. |
| | 8.4 Overloaded mixing bowl | 8.4 Adjust contents of bowl per Mixing Capacities Table |

^{*} Remedies designated with a * require the services of an authorized service agent.

REMOVAL OF TOP COVER AND REAR ACCESS PANEL

- a. The top cover (Fig. 10 [17]) must be removed in order to perform the maintenance operations. It is secured by a spring clip at its front end and a screw at its rearward end. First, DISCONNECT THE ELECTRICAL POWER FOR SAFETY. Then, remove the screw in the rear (Fig. 10 [20]), lift rear of cover, push forward about 3 inches and lift cover off. Reinstall in reverse procedure using care to insure that the cover sits squarely and uniformly on the mixer housing.
- b. Remove rear access panel (Fig. 10 [22]) by removing eight screws and washers (Fig. 10 [23, 24]).

MECHANICS MAINTENANCE

A mechanic should perform the following inspection and maintenance as required depending on severity of use, but at least yearly.

1. CVT BELT DRIVE

Start mixer and shift speed control (Fig. 1 [9]) to the slowest speed (Low, 1).
 Stop mixer.

WARNING: FOR SAFETY, DISCONNECT ELECTRICAL POWER. Place tag or sign on electrical supply warning that MIXER IS BEING WORKED ON; DO NOT TURN ON.

- b. Remove rear access panel (Fig. 10 [22]) and top cover (Fig. 10 [17]) as described above.
- c. Inspect drive belt (Fig. 11 [2]) for proper adjustment. Outer surface of belt should be approximately flush to 1/16" below the outer edges of the input pulley flanges (Fig. 11 [5]) when mixer has been shut off in first speed (see Pg. 17). If drive belt is excessively frayed or has a heavily glazed surface, replace it. However, it is generally the best judgment to leave a drive belt in a machine if it is performing well, even it if shows moderate wear. Inspect gripping surfaces of drive belt for excessively glazed surfaces or contamination by grease or oil.

To replace belt, run mixer in 1st speed. Disconnect electrical supply. Shift machine to 4th speed. Unwrap belt from top pulley. Slide belt between top pulley nose and cam (Fig. 8 [8]). Remove belt from lower pulley.

<u>WARNING:</u> Lower pulley flanges are spring loaded. Keep fingers away while removing belt.

The bowl must be lowered in order for the belt to clear the nose of the lower pulley when removing belt. To install new belt wrap belt around lower pulley. Pull belt into the spring loaded flanges. A pry bar will help separate the flanges. Continue replacement in reverse order from belt removal. Adjustment of the belt drive will most likely be required.

d. Readjustment of the drive belt, where a slight stretching or normal seating has caused outer surface of the belt to exceed the acceptable limit of flush to 1/16" below the input pulley flanges (see Pg. 17) is as follows: Loosen Kep nuts (Fig. 8 [12]) securing the bracket (Fig. 8 [15]) and holder (Fig. 8 [1]) to the housing. If the belt was riding outside the pulley flanges, tap the speed control assembly lightly towards the rear of the mixer. If the belt was riding more than 1/16" below the pulley flanges, tap the

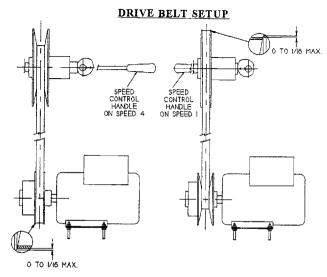
Speed control assembly towards the front of the machine (shifting to 2nd second speed will help).

Note: The assembly must remain perpendicular to the mixer housing walls. Failure to do so will result in the binding of the shaft (Fig. 8 [10]) in the bearing (Fig. 8 [21]). Retighten the Kep nuts and run mixer in 1st speed and check belt position. Repeat procedure if necessary.

e. Once the upper pulley (Fig. 11 [5]) has been adjusted, the lower pulley must be checked. Start mixer and shift to 4th speed. Turn mixer off and check position of belt. The belt should be flush to 1/16" below outer edges of the pulley flanges. If adjustment is needed, loosen Kep nuts (Fig. 11 [14]) and raise or lower the motor using the Kep nuts on the under side of motor. Retighten top Kep nuts and run mixer in 4th speed to check new belt position.

Note: The motor must remain level with the mixer base (Fig. 10 [1]). If not, poor shifting and belt life will result.

WARNING: FOR SAFETY, DISCONNECT ELECTRICAL POWER.



2. MOTOR

Check motor (Fig. 11 [16]) for overheating and excessive noise. If defective, send to a local electrical repair shop.

3. BOWL LIFT ADJUSTMENT

WARNING: FOR SAFETY, DISCONNECT ELECTRICAL POWER.

- a. Check adjustment by placing the bowl on the lowered bowl support, and place a batter beater on the beater shaft (Fig. 1 [1]).
- b. Raise bowl support to the upper position.
- c. Check clearance between bottom of the bowl and the adjacent underside of the batter beater. Clearance should be 3/16" ± 1/16".

- d. If adjustment is required, loose jam nut (Fig. 7 [26]) and turn threaded bowl stop rod (Fig. 7 [25]) until the desired clearance is obtained, then tighten the jam nut.
- 4. DRIVE BELT REPLACEMENT (See CVT Belt Drive)

5. **LUBRICATION**

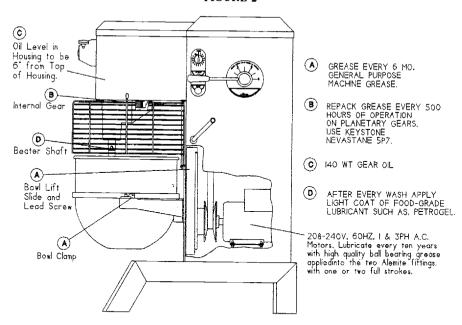
WARNING: FOR SAFETY, DISCONNECT ELECTRICAL POWER TO THE

- a. The lubrication instructions are listed in Figure 2.
- b. Remove access panel (Fig. 10 [22]), top cover (Fig. 10 [17]) per page 4.
- c. In order to service the gearbox, it will be necessary to further remove the gearbox cover (Fig. 3 [2]). A thin blade putty knife will prove helpful in separating the silicone sealant between this cover and the gearbox. Do not bend cover. Thoroughly remove all dried sealant before applying new sealant when reinstalling the cover. Do not allow dried sealant to enter gearbox. Silicone rubber sealant such as Dow Corning Silastic 732RTV or Permatex Form-A-Gasket are recommended.

WARNING: NEVER WORK ON THE GEARBOX WITH THE MIXER RUNNING.

d. Use care to avoid getting lubricant of any kind on the drive belt and pulleys as this would seriously deteriorate the belt grip and mixer performance.

LUBRICATION INSTRUCTIONS FIGURE 2



Page 18

REPAIR INSTRUCTIONS

(Including Disassembly, Replacement and Reassembly)

A. GEARBOX (Fig. 3)

GEARBOX REMOVAL:

- 1. Run mixer and shift to first speed then turn off.
- 2. WARNING: FOR SAFETY, DISCONNECT ELECTRICAL SUPPLY.
- 3. Remove set screw (Fig. 3 [16]) and drain oil.
- Remove rear access panel (Fig. 10 [22]), top cover (Fig. 10 [17]), instruction on page 4.
- 5. Remove drive belt per instructions (1) in Mechanic's Maintenance.
- Remove speed control assembly (Fig. 8)
 See Speed Control Disassembly.
- 7. Loosen two allen set screws (Fig. 11 [4]) that secure input pulley (Fig. 11 [5]) and remove pulley completely from input shaft (Fig. 6 [10]).
- 8. Remove gearbox cover (Fig. 3 [2]). Remove remaining oil from gearbox.
- 9. WARNING FOR SAFETY! The gearbox is very heavy, weighing approximately 261 pounds and must, therefore, be supported safely before starting step number (10). It is recommended that a portable hydraulic crane of sufficient capacity be used. A chain may be attached to the P.T.O. shaft (Fig. 5 [11]) at mid-length. Use care not to rub or scrape the gears.
- Remove four cap screws (Fig. 3 [11]) securing gearbox housing to mixer housing. Remove gear box assembly and place on work bench.
- 11. Rotate gear train by hand and inspect for worn or chipped gears, bent shaft, worn bearings and excessive backlash. Backlash measured at gear teeth exceeding 1/32" is considered excessive. After trouble has been isolated, proceed to disassemble.

GEARBOX DISASSEMBLY:

- 1. Beater Head (Fig. 4)
 - a. Remove cap screw (Fig. 4 [21]) and remove beater head assy. If beater head does not drop easily, use the two jacking screws (Fig. 4 [19]) to assist in removal. Do not pry against outer rim of beater head housing (may cause breakage).
 - b. Remove top retaining ring [9], gear [11], bottom retaining ring [9], key [7], seal [10], retaining ring [9], retaining ring [8], and press shaft [2] (at gear end) from housing [1].
 - c. Press bearings [4 & 6] along with spacer [5] from housing [1].

2. Power Take Off (Fig. 5)

- Remove three cap screws (Fig. 5 [5]) and washers [6] holding P.T.O. housing [3] to gearbox housing (Fig. 3 [1]).
- b. Remove retaining ring [8] from helical gear end of PTO shaft [11]. Remove gear [13] and key [14].
- c. Using two cap screws as jacking screws (Fig. 5 [5]) in the tapped holes of gearbox housing (Fig. 3 [1]), dislodge and remove the P.T.O. assembly from the gearbox housing.
- d. Remove and slide bevel gear [12] away from P.T.O. housing [3] and remove key [15].
- e. Remove internal retaining ring [9], P.T.O. adapter [2] and press shaft, bearing, and gear assembly from P.T.O. housing [3].
- f. Remove four retaining rings [8] from P.T.O. shaft [11], and press ball bearings [10] and P.T.O. bevel gear [12] off P.T.O. shaft [11].
- g. Remove P.T.O. oil seal [7] from P.T.O. housing [3] and discard.

3. <u>Input</u> (Fig. 6)

- a. Remove four cap screws (Fig. 6 [8] from flange of input housing [6].
- b. Thread two of the cap screws [8] into the two threaded jacking holes in the flange [6]. Turn these two screws in evenly until the input housing is pushed free of the gear box housing.
- c. Remove retaining ring [2] at gear end of the shaft, and press off bearing [4].
- d. Remove retaining ring [3] and proceed to remove input shaft [10] with bearing [4], out of input housing [6] by pressing from the gear end of the shaft.
- e. Remove rubber seal [4] from housing. Seal must be replaced.
- f. Remove remaining retaining ring [3] from housing.

4. <u>Vertical Shaft</u> (Fig. 4)

- a. Remove beater head as covered in Gearbox Disassembly (1) a-c.
- b. Remove P.T.O. assembly as covered in Gearbox Disassembly (2) a-g.
- Remove key (Fig. 4 [18]) and retaining ring [9] from vertical shaft [13].
- d. Drive vertical shaft downward into the gearbox. A brass drift will be necessary to drive shaft completely free from the gear box. Lift bevel gear [12] and key [14] from gear box.

- e. Insert drift through top of bearing [15] in gearbox and drive seal [16] out bottom of
 - f. Reach up into bore from bottom opening with snap ring pliers and remove retaining ring [8] from bore.
 - g. Carefully drive upper bearing [15] out bottom of bore.
 - h. Press bearing [17] from shaft [13].

GEARBOX ASSEMBLY

 Clean all components (except bearings) with safety approved cleaning solvent. Inspect components for defects and replace those found to be defective

NOTE: If planetary pinion gear (Fig. 4 [11]) requires replacement, it is likely that the planetary gear (Fig. 3 [20]) requires replacement also.

- 2. If shafts have become slightly scored during the disassembly process, it is necessary to polish the shafts with fine machinist's crocus cloth. An especially smooth finish is necessary in the working seal area of the shafts. Use care to avoid excessive removal of shaft surface or proper fit of components will be lost.
- 3. Always fit new rubber seals when rebuilding the gearbox. Use special attention in examining the end of the shafts over which the seals will be pushed. The slightest burring or scoring will abrade or cut the delicate seal lips. A light polish of the shaft ends with crocus cloth is recommended.
- 4. Reassembly should be carried out in reverse of the disassembly procedure stated above. Successful reassembly is very dependent on the cleanliness of all surfaces, particularly the bores of housings, gears, and bearings, as well as the outer surface of shafts. It is good to recheck each component for cleanliness as it is picked up for reassembly.
- Transmission should be progressively checked for smooth operation while on the workbench by hand turning each assembly as it is installed.
- 6. Lubrication of the gear box should be done following its installation on the mixer. The helical and bevel housing compartments are filled to a level 6" (10 qt. SRM60+) (16 qt. SRM80+) from the top edge of the gear box with SAE 140 gear oil.

B. BOWL LIFT & SLIDE (Fig. 7)

BOWL LIFT & SLIDE DISASSEMBLY & REMOVAL

CAUTION: FOR SAFETY, DISCONNECT ELECTRICAL SUPPLY.

- 1. Remove top cover and rear access panel as detailed on page 4.
- 2. Remove drive belt from motor pulley as stated in Mechanic's Maintenance Section 1 (c).
- 3. Remove drive assembly (Fig. 11) from mixer housing as follows:

- a. Remove the top 4 Kep nuts (Fig. 11 [14]) that secure motor assembly to mixer base
- b. Remove motor electrical leads (Fig. 11 [13]) from magnetic starter (Fig. 10 [26]). Remove motor ground lead from stud.
- c. Lift motor assembly from mixer housing.

CAUTION: Drive assembly can weight in excess of 100 lb. depending on type of motor. Use mechanical lift assistance.

- 4. Remove bowl from bowl support.
- 5. Remove two screws (Fig. 9 [12]).
- 6. Remove 4 screws (Fig. 7 [32]).

CAUTION: Someone should be holding bowl support (Fig. 9 [1]) while the screws are being removed, so that it does not fall and get damaged. Remove slide cover (Fig. 9 [10]).

- 7. Loosen set screws (Fig. 7 [2]) and Fig. 7 [8]).
- Withdraw handle assy. (Fig. 7 [38]) from the outside of mixer housing.
 Collect gear [9], key [39], washers [4 & 42] and collar [3].
- 9. Remove 8 nuts (Fig. 7 [31]) and pull slide/frame assembly from studs and remove from mixer housing.

CAUTION: Assembly is heavy.

- Remove 2 hex head cap screws (Fig. 7 [15]). This allows for removal of yoke (Fig. 7 [7]).
- 11. Drive roll pin (Fig. 7 [11]) from miter gear (Fig. 7 [12]). Remove miter gear and thrust washer (Fig. 7 [4]) from lead screw (Fig. 7 [10]).
- 12. Press lead screw (Fig. 7 [10]) through hole in frame [1].
- Loosen set screws (2). Remove collar [3] and thrust washer (Fig. 7 [4]) by pulling them from lead screw.
- 14. Unscrew lead screw from floating nut (Fig. 7 [28]) and remove.
- 15. Remove 4 screws (Fig. 7 [27]) and remove gibbs (Fig. 7 [29]). The slide may now be removed from the frame.

NOTE: Save any shim strips that may have been used between the frame and the gibbs. It is recommended that the location be marked at this time with a pencil to facilitate reinstallation.

BOWL LIFT & SLIDE, REASSEMBLY & INSTALLATION (Fig. 7)

- 1. Grease sliding surfaces of slide & frame. See Lubrication page 18.
- 2. Keeping shims in place (if any), position slide in frame as shown in Fig. 7.

- Secure slide (Fig. 7 [34]) in frame [1] by bolting gibbs [29] to frame with four hex head cap screws [15]. Check to insure that slide moves freely in frame. If not, remove gibbs and shim where needed.
- 4. Screw lead screw [10] into floating nut [28] and push slide to bottom of frame so that the lead screw does not protrude through hole in frame.
- Place the collar [3] and then thrust washer [4] over top of lead screw [10].
 Push slide and lead screw up so that the lead screw protrudes through hole in frame
- 6. Place thrust washer [4] and then miter gear [12] on top of lead screw [10].

 Drive roll pin [11] through miter gear [12] and into lead screw [10].
- 7. Push slide & lead screw down as far as possible. Slide collar [3] and thrust washer [4] up against frame and tighten set screws [2] in collar against corresponding flats on lead screw [10].
- 8. Check DU bearings in yoke for burrs (Fig. 7 [6]). Install yoke [7] to frame [1] (do not tighten bolts).
- 9. Lift assembly into mixer housing. Place assembly on 8 weld studs.

 Tighten assembly to mixer housing using washers and Kep nuts.
- 10. Insert bowl lift lever assembly (Fig. 7 [35-38,40,41]) through hole in mixer housing. Slide collar [3] and thrust washer [42] over end of lever. Insert lever through yoke while holding the thrust washer [4] and miter gear [9] in position. Continue to slide lever through until miter gear seats against shoulder on the lever shaft. Align key ways of miter gear and lever, insert key [39]. Tighten set screw [8]. Squeezing miter gear [9] and collar [42], tighten set screw [21.
- 11. With yoke bolts [15] lightly tightened, tap yoke back and forth until the miter gears mesh smoothly. Tighten bolts [15]. Adjust hub [40] so that it is positioned 1/32" from mixer housing. Tighten set screw [41].
- Lubricate the miter gears and lead screw with general purpose machine grease.
- Raise and lower bowl lift by turning the bowl lift lever [37]. The mechanism should turn freely.
- 14. Raise bowl all the way. Check clearance between bottom of bowl and batter beater attachment. The clearance should be $3/16 \pm 1/16$ ". If the clearance is not sufficient, adjust bowl stop (Fig. 7 [25]). Loosen jam nut [26], raise or lower bowl stop as needed and tighten jam nut.
- 15. Make sure bowl lift safety switch (Fig. 7 [19]) is actuated by the retainer plate [24] when the bowl is raised <u>completely</u>. If the switch is not actuated, or the lever on the switch is being bent, adjust the bracket [17] by loosening screws [23] and raising or lowering until the switch actuates.

Note: The bowl should continue to raise 1/8" after switch actuates.

SPEED CONTROL (Fig. 8)

- 1. Run mixer and shift to first speed then turn mixer off.
- 2. Warning: For safety disconnect electrical supply.
- 3. Remove rear access panel (Fig. 10 [22]) and top cover (Fig. 10 [17]) instructions on page 4.
- 4. Remove drive belt per instructions 1 in mechanics maintenance.
- 5. Warning: Handle (Fig. 8 [25]) has spring loaded rotation. Hold handle to prevent injury.

While holding handle (Fig. 8 [25]) remove set screws [20] and rotate handle counter clockwise two full turns. This disengages the spring [11]. Note: The ball [3] and spring [4] may fall out of block [6].

- 6. Loosen set screws (Fig. 8 [5]), drive roll pin [22] from hub [23] and pull hub from shaft [10]. Unscrew hub [23] and handle [25] from lever [24].
- Slide retaining rings [9], cam [8] and spring [11] towards locating block
 [6]. Remove key [19] from shaft, loosen nuts [12] securing detent housing
 [1].
- 8. Drive shaft [10] inward until it contacts the left side housing wall. Pull detent housing [1] and shaft assembly [10] towards rear of machine and remove assembly from mounted bearing [18].
- Slide spring [11] retaining ring [9], cam [8] and belleville washer [2] from shaft [10]. Drive roll pin [7] from block [6]. Slide block [6] from shaft [10].
- Remove nuts [12], washers [13 & 14] and bracket [15] from housing.
 Remove bolts [16 & 17] securing bearing [18] to bracket [15].

Reassemble in reverse order of above

Adjust assembly as described in Mechanics Maintenance 1 d, & e.

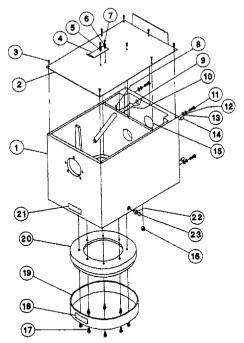
If speed handle creeps during operation tighten the two set screws (Fig. 8 [5]) which push against the belleville washer [2] until creeping stops.

HOUSING (Fig 10)

For the remaining parts which have not been discussed pertain to electrical components, and the housing, Figures 10, 12A, 12B, and 12C should provide adequate guidance for the disassembling and reassembling of these parts.

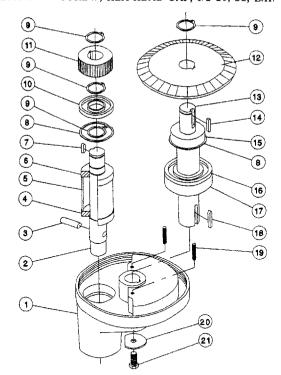
GEAR BOX

| FIGURE 3 | | | |
|------------|----------|--------------------------------------|------|
| ILLUS. NO. | PART NO. | <u>DESCRIPTION</u> | QTY. |
| 1 | 1064530 | HOUSING, TRANSMISSION-SRM60+ | 1 |
| | 1080054 | HOUSING, TRANSMISSION-SRM80+ | 1 |
| 2 | 1064417 | COVER, TRANSMISSION-SRM60+ | 1 |
| | 1080022 | COVER, TRANSMISSION-SRM80+ | 1 |
| 3 | 1200008 | SCREW, PHILLIPS PAN HEAD 8-32 X 3/8 | 8 |
| 4 | 1024041 | SPRING CLIP | 1 |
| 5 | 1200076 | FLAT WASHER #10 | 2 |
| 6 | 4400065 | LOCK WASHER #10 | 2 |
| 7 | 1200012 | SCREW, PHILLIPS PAN HEAD 10-32 X 1/2 | 2 |
| 8 | 1200378 | SCREW, CUP POINT SET 8-32 X 1/4 | 1 |
| 9 | 1064507 | PLUG, OILING TUB | 2 |
| 10 | 1064418 | TUBING, TRANSMISSION | 1 |
| 11 | 1200057 | SCREW, HEX HEAD CAP 1/2-20 X 1 | 4 |
| 12 | 1200085 | LOCK WASHER 1/2 | 4 |
| 13 | 1200084 | FLAT WASHER 1/2 | 4 |
| 14 | 1200403 | PIN, DOWEL 3/8 DIA X 1/2 | 2 |
| 15 | 1061990 | PLUG, OIL-SRM60+ | 1 |
| | 1080039 | PLUG, OIL-SRM80+ | 1 |
| 16 | 1200329 | DRAIN PLUG, 1/4NPT HEX HD SOCKET | 1 |
| 17 | 1200365 | SCREW, SOCKET HEAD CAP 1/4-20 X 1/2 | 8 |
| 18 | 4400269 | LABEL, ROTATION | 1 |
| 19 | 1061002 | SPLASH RING | 1 |
| 20 | 1061111 | GEAR, INTERNAL | 1 |
| 21 | 4400345 | LABEL, UNIVEX-SRM60+ | 1 |
| | 4400327 | LABEL, UNIVEX-SRM80+ | 1 |
| 22 | 1012438 | HOLDER, MAGNET | 2 |
| 23 | 1012439 | MAGNET | 2 |
| | | | |



BEATER HEAD AND VERTICAL SHAFT ASSEMBLY FIGURE 4

| ILLUS. NO. | PART NO. | DESCRIPTION. | QTY. |
|------------|----------|---|------|
| 1 | 1064423 | HOUSING, BEATER HEAD | 1 |
| 2 | 1064424 | SHAFT, BEATER HEAD | 1 |
| 3 | 1200310 | PIN, DOWEL | 1 |
| 4 | 1061959 | BEARING, BALL | 1 |
| 5 | 1064426 | SPACER, BEATER HEAD | 1 |
| 6 | 1061917 | BEARING, BALL | 1 |
| 7 | 4400231 | KEY 1/4 SQ. X 1, CL 1, ROUNDED BOTH ENDS | 1 |
| 8 | 1200354 | RETAINING RING, INTERNAL | 2 |
| 9 | 1200353 | RETAINING RING, EXTERNAL | 4 |
| 10 | 1064509 | SEAL, | 1 |
| 11 | 1061003 | GEAR, PINION, BEATER HEAD | 1 |
| 12 | 1064420 | GEAR, BEVEL, VERTICAL SHAFT-SRM60+ | 1 |
| | 1080016 | GEAR, BEVEL, VERTICAL SHAFT-SRM80+ | 1 |
| 13 | 1064422 | SHAFT, VERTICAL-SRM60+ | 1 |
| | 1080014 | SHAFT, VERTICAL-SRM80+ | 1 |
| 14 | 1200314 | KEY, 3/8 SQ. X 1-1/2, CL 1, ONE END ROUNDED |) 1 |
| 15 | 1064513 | BEARING, BALL, VERTICAL | 1 |
| 16 | 1064512 | SEAL, | 1 |
| 17 | 1064500 | BEARING, BALL, VERTICAL | 1 |
| 18 | 1200315 | KEY, 3/8 SQ. X 2, CLASS 1, ONE END ROUNDED | D 1 |
| 19 | 1200405 | SCREW, SET 5/16-18 X 1-3/4 | 2 |
| 20 | 1064448 | WASHER, 1/2 | 1 |
| 21 | 1200379 | SCREW, HEX HEAD CAP, 1/2-20, SS, L.H. | 1 |

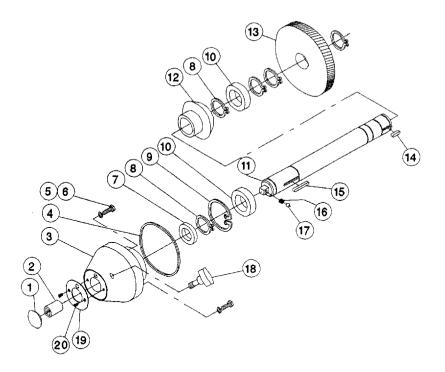


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P.T.O. ASSEMBLY FIGURE 5

| ILLUS. NO. | PART NO. | DESCRIPTION | OTY. |
|------------|----------|---|------------------|
| 1 | 8800033 | CAP, CHROME, PTO | 1 |
| 2 | 8800012 | ADAPTER, PTO | 1 |
| 3 | 1061107 | HOUSING, PTO-SRM60+ | 1 |
| | 1080018 | HOUSING, PTO-SRM80+ | .1 |
| 4 | 1064514 | O-RING SRM60+ | 1 |
| | 1080041 | O-RING SRM80+ | 1 |
| 5 | 4400220 | SCREW, HEX HD CAP, 5/16-18 X 1 | 1 3 3 1 |
| 6 | 1200077 | WASHER, LOCK, 5/16 | 3 |
| 7 | 1064510 | SEAL, OIL, PTO-SRM60+ | |
| | 1080040 | SEAL, OIL, PTO-SRM80+ | 1 |
| 8 | 1200253 | RETAINING RING, EXTSRM60+ | 6 |
| | 1200316 | RETAINING RING, EXTSRM80+ | 6 |
| 9 | 1200254 | RETAINING RING, INTSRM60+ | 1 |
| | 1061909 | RETAINING RING, INTSRM80+ | 1 |
| 10 | 1030148 | BEARING, BALL-SRM60+ | . 2 |
| | 1064501 | BEARING, BALL-SRM80+ | 2 |
| 11 | 1064458 | SHAFT, PTO-SRM60+ | 1 |
| | 1080019 | SHAFT, PTO-SRM80+ | 1 |
| 12 | 1064459 | GEAR, BEVEL, PTO-SRM60+ | 1 |
| | 1080017 | GEAR, BEVEL, PTO-SRM80+ | 1 1 1 |
| 13 | 1064428 | GEAR, HELICAL, PTO-SRM60+ | 1 |
| | 1080015 | GEAR, HELICAL, PTO-SRM80+ | |
| 14 | 4400231 | KEY, 1/4 SQ. X 1, CL 1, RND ENDS | 1 |
| 15 | 4400231 | KEY, 1/4 SQ. X 1, CL 1, RND ENDS SRM60+ | 1 |
| | 4400500 | KEY 1/4 SQ. X 1 1/2 LG CL 1, RND ENDS | |
| | | SRM80+ | 1 |
| 16 | 4400006 | SPRING, 1/4 O.D., COMPRESSION | 1 |
| 17 | 4400016 | BALL, STEEL, 1/4 DIA. | 1 |
| 18 | 4400229 | KNOB ASSEMBLY, PTO | 1 |
| 19 | 4400210 | WASHER, PTO | 1 |
| 20 | 8900019 | SCREW SFHD 6-32 X 3/4 | 2 |

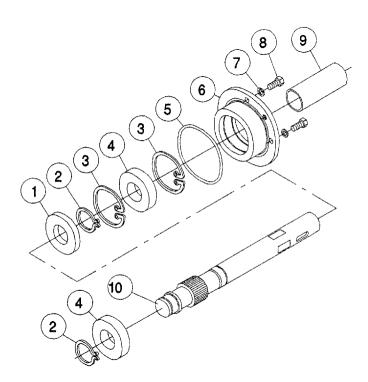
P.T.O. ASSEMBLY FIGURE 5



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INPUT ASSEMBLY FIGURE 6

| ILLUS. NO. | PART NO. | DESCRIPTION | OTY. |
|------------|----------|--|------|
| 1 | 1064511 | SEAL, INPUT | 1 |
| 2 | 1200316 | RETAINING RING, EXTERNAL | 2 |
| 3 | 1061909 | RETAINING RING, INTERNAL | 2 |
| 4 | 1064501 | BEARING, INPUT HOUSING | 2 |
| 5 | 1064515 | O-RING, INPUT HOUSING | 1 |
| 6 | 1064430 | HOUSING, INPUT | 1 |
| 7 | 1200077 | WASHER, LOCK, 5/16 | 4 |
| 8 | 1200039 | SCREW, HX HD CAP, 5/16-18 X 3/4, ZINC PLTI | D 4 |
| 9 | 1064433 | SLEEVE, INPUT SHAFT | 1 |
| 10 | 1064532 | GEAR/SHAFT, INPUT | 1 |

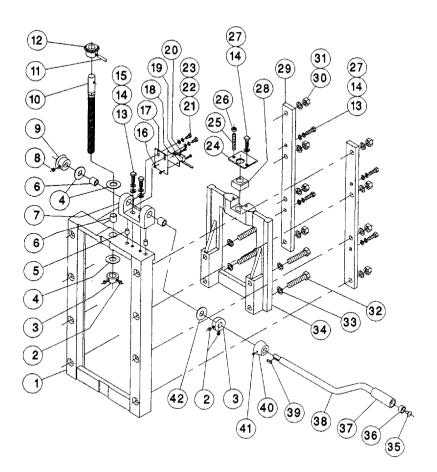


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BOWL LIFT ASSEMBLY FIGURE 7

| ILLUS. NO. | PART NO. | DESCRIPTION. | QTY. |
|------------|----------|--|--------|
| 1 | 1062190 | FRAME | 1 |
| 2 | 4400407 | SCREW, SET, 5/16-18 X 1/4 LG. | 4 |
| 3 | 1062193 | COLLAR, LEAD SCREW (COMES WITH | |
| 4 | 1061821 | ILLUSTRATION # 2) WASHER, THRUST | 2 3 |
| 5 | 1200403 | PIN, DOWEL, 3/8 DIA. X 1/2 LG. | 2 |
| 6 | 1061820 | BEARING | 3 |
| 7 | 1064452 | YOKE | 1 |
| 8 | 1200036 | SCREW, SET, 5/16-24 X 3/8 LG. | 1 |
| 9 | 1062217 | GEAR, MITER, HANDLE SHAFT | 1 |
| 10 | 1064457 | SHAFT, LEAD SCREW | 1 |
| 11 | 4400004 | PIN, ROLL, 1/4 DIA, X 1-1/8 LG. | 1 |
| 12 | 1062970 | GEAR, MITER, LEAD SCREW | 1 |
| 13 | 1200078 | WASHER, 5/16 | 1 |
| 14 | 1200073 | WASHER, LOCK, 5/16 | 7 |
| 15 | 1200369 | SCREW, HEX HD CAP 5/16-18 X 1 1/4 | 2 |
| 16 | 1200433 | NUT, ELASTIC STOP, 4-40 | 2 |
| 17 | 1064411 | BRACKET, BOWL LIFT SWITCH | 1 |
| 18 | 7100023 | INSULATION BARRIER | 1 |
| 19 | 7100103 | SWITCH, BOWL LIFT | 1 |
| 20 | 1200432 | SCREW, HEX HD 4-40 X 3/4 | 2 |
| 21 | 1200076 | WASHER, #10 | 2 |
| 22 | 4400065 | WASHER, LOCK, #10 | 2 |
| 23 | 1200012 | SCREW, PHILLIPS PAN HD., 10-32 X 1/2 | 2 |
| 24 | 1062187 | PLATE, RETAINER | 1 |
| 25 | 1200431 | SCREW, SET, 5/16-18 X 2 | 1 |
| 26 | 1200063 | NUT, KEP, 5/16-18 | 1 |
| 27 | 4400220 | SCREW, HEX HD CAP 5/16-18 X 1 | 5 |
| 28 | 1064444 | NUT, FLOATING | 1 |
| 29 | 1062191 | GIBB | 2 |
| 30 | 1200083 | WASHER, 3/8 | 8 |
| 31 | 1200388 | NUT, ELASTIC STOP, 3/8-16 | 8 |
| 32 | 1200402 | SCREW, HEX HD CAP 1/2-20 X 2-3/4 | 4 |
| 33 | 1200085 | WASHER, LOCK, 1/2 | 4 |
| 34 | 1062189 | SLIDE | 1 |
| 35 | 1200325 | SCREW, FLAT HD SCK CAP, 1/4-20 X 3/4, SS | 1 |
| 36 | 1064416 | CAP, B.L. HANDLE | 1 |
| 37 | 1064516 | HANDLE | 1 |
| 38 | 1080025 | LEVER, B.L. | 1 |
| 39 | 4400232 | KEY, 3/16 SQ. X 1 LG., CL ONE, RND ENDS | 1 |
| 40 | 1064450 | HUB, B.L. | 1 |
| 41 | 4400154 | SCREW, SET, #10-32 X 1/4 | 1 |
| 42 | 1000517 | WASHER, BRONZE, 3/4 I.D X 1-1/8 O.D. X 1/8 | 1 |

BOWL LIFT ASSEMBLY FIGURE 7

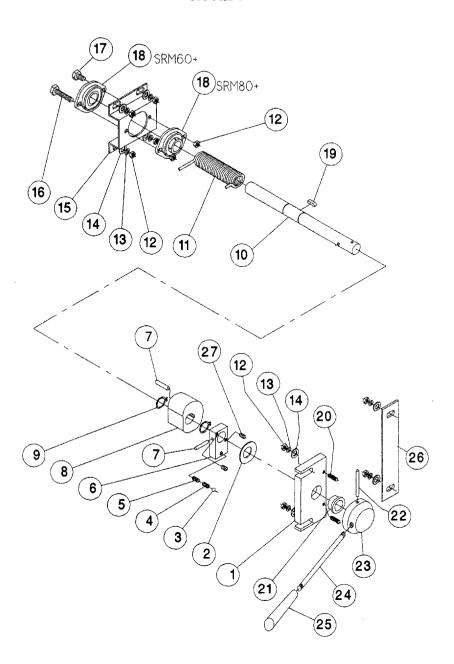


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SPEED CONTROL ASSEMBLY FIGURE 8

| ILLUS. NO. PART NO. | | DESCRIPTION | QTY |
|---------------------|---------|---|-----|
| 1 | 1064436 | HOUSING, DETENT | 1 |
| 2 | 1200324 | WASHER, BELLEVILLE | 1 |
| 3 | 4400016 | BALL, STEEL, 1/4" DIA. | 1 |
| 4 | 4400006 | SPRING, 1/4" O.D. | 1 |
| 5 | 1200036 | SCREW, SET, 5/16-24 X 3/8 | 1 |
| 6 | 1064437 | BLOCK, S.C. LOCATING | 1 |
| 7 | 1200321 | PIN, ROLL, 1/4 DIA. X 1-1/2, PLAIN FINISH | 2 |
| 8 | 1064438 | CAM, S.C. | 1 |
| 9 | 1200317 | RETAINING RING | 2 |
| 10 | 1064434 | SHAFT, S.C. CAM-SRM60+ | 1 |
| | 1080026 | SHAFT, S.C. CAM-SRM80+ | 1 |
| 11 | 1064439 | SPRING, TORSION | 1 |
| 12 | 1200063 | NUT, KEP | 10 |
| 13 | 1200078 | WASHER, 5/16 | 8 |
| 14 | 1200083 | WASHER, 5/16 LG. O.D. | 8 |
| 15 | 1080027 | BRACKET, S.C. BEARING HOLDER | 1 |
| 16 | 1200327 | SCREW, HEX HD 5/16-18X2, FULLY THD | 1 |
| 17 | 1200039 | SCREW, HEX HD 5/16-18 X 3/4 | 2 |
| 18 | 1064508 | BEARING, FLANGE | 1 |
| 19 | 4400231 | KEY, ROUND END, 1/4" SQ. X 1 | 1 |
| 20 | 1200319 | SCREW, SOCKET HD SET, 5/16-18 X 1 | 2 |
| 21 | 1064502 | BEARING, BRONZE FLANGE | 1 |
| 22 | 1200361 | PIN, ROLL, 1/4 DIA. X 3 | 1 |
| 23 | 1064435 | HUB, S.C. | 1 |
| 24 | 1020048 | LEVER, S.C. | 1 |
| 25 | 4400202 | KNOB, S.C. | 1 |
| 26 | 1064456 | STRAP, SPEED CONTROL | 1 |
| 27 | 1000101 | CODERY CET #/1/ AC 3/ 1 1/0 | ^ |

SPEED CONTROL ASSEMBLY FIGURE 8

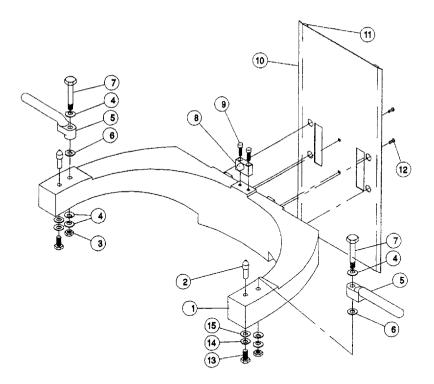


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BOWL SUPPORT ASSEMBLY FIGURE 9

| ILLUS. NO. | PART NO. | DESCRIPTION | QTY. |
|------------|----------|---|------|
| 1 | 1061028 | SUPPORT, BOWL-SRM60+ | 1 |
| | 1080028 | SUPPORT, BOWL-SRM80+ | 1 |
| 2 | 1064454 | PINS, BOWL SUPPORT-SRM60+ | 2 |
| | 1080030 | PINS, BOWL SUPPORT-SRM80+ | 2 |
| 3 | 1200388 | NUT, ELASTIC STOP 3/8-16 | 2 |
| 4 | 1200091 | WASHER, BELLEVILLE | 4 |
| 5 | 1064322 | CLAMP, BOWL | 2 |
| 6 | 1200093 | SHIM, WASHER | 2 |
| 7 | 1200449 | SCREW HEX HD 3/8-16 X 3 1/2 | 2 |
| 8 | 1064455 | CLAMP, BOWL, REAR-SRM60+ | 1 |
| | 1080029 | CLAMP, BOWL, REAR-SRM80+ | 1 |
| 9 | 1200322 | SCREW, SOCKET HD, 1/4-20 X 1 -SRM60+ | 2 |
| | 1200439 | SCREW, SOCKET HD, 1/4-20 X 1 1/2-SRM80+ | 2 |
| 10 | 1080037 | COVER, SLIDE, MOVEABLE | 1 |
| 11 | 1020040 | STRIP, RUBBER, 21" | 2 |
| 12 | 1200008 | SCREW, PHILLIPS PAN HD. #8-32 X 3/8" | 2 |
| * 13 | 1200382 | SCREW, 1/4-20UNC-2B X 7/8 | 2 |
| * 14 | 4400005 | LOCK WASHER, 1/4 | 2 |
| * 15 | 1200075 | WASHER, 1/4 | 2 |

^{*} INCLUDED ON SRM80+ ONLY.



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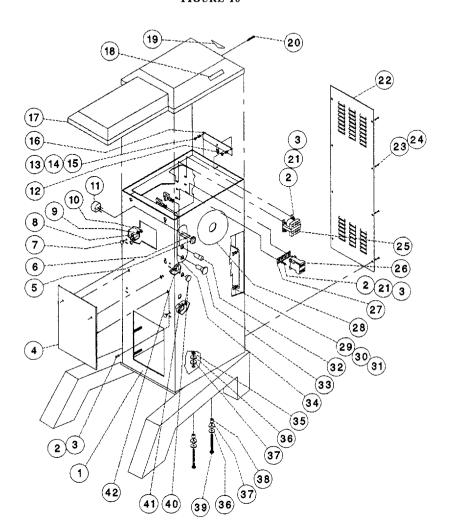
HOUSING ASSEMBLY FIGURE 10

| ILLUS. | NO. PART | NO. DESCRIPTION | OTY. |
|--------|----------|---|------|
| 1 | 1064552 | HOUSING, MIXER SRM60+ | 1 |
| | 1080053 | HOUSING, MIXER SRM80+ | i |
| 2 | 1200060 | NUT, HEX 10-32 | 2 |
| 2 | 1200000 | WITH TRANSFORMER CONTROL | 6 |
| 3 | 1200076 | WASHER, FLAT #10 | 2 |
| 3 | 1200076 | WITH TRANSFORMER CONTROL | 6 |
| 4 | 1064554 | COVER, FIXED SLIDE-SRM60+ | ì |
| 7 | 1080055 | COVER, FIXED SLIDE-SRM80+ | i |
| 5 | 7100028 | KNOB, TIMER | 1 |
| 6 | | SCREW, M4 X .7 MM, CHZ. HD X 8MM LONG | 2 |
| 7 | 1200318 | BOLT, CARR 1/4-20 X 3/4 SS | 4 |
| | 4400413 | SPACER | 4 |
| 8 9 | 4400003 | | 2 |
| | 1012441 | BRACKET, UPPER | 4 |
| 10 | 4400141 | NUT, KEP 1/4-20 | 1 |
| 11 | 7100027 | TIMER | 1 |
| 12 | 4400001 | NUT, TINNERMAN | 2 |
| 13 | 1200008 | SCREW, PHILLIPS PAN HD. #8-32 X 3/8 | 2 |
| 14 | 4400183 | WASHER, LOCK, #8 | 2 |
| 15 | 1200092 | WASHER, FLAT, #8 | |
| 16 | 1024042 | SPRING, TOP COVER | 1 |
| 17 | 1064412 | COVER, TOP-SRM60+ | 1 |
| | 1080023 | COVER, TOP-SRM80+ | 1 |
| 18 | 4400113 | LABEL, STOP, UNPLUG (Not for Europe) | 1 |
| 19 | 4400114 | LABEL, COVER REMOVAL (Not for Europe) | 1 |
| 20 | 1200422 | SCREW, SHEET METAL, TOP COVER | 1 |
| | 1200451 | SCREW (SECURITY OPTION) | 1 |
| 21 | 4400065 | WASHER, LOCK, #10 | 2 |
| | | WITH TRANSFORMER | 6 |
| 22 | 1064419 | PANEL, REAR | 1 |
| 23 | 4400208 | SCREW, PHILLIPS HD. 1/4-20 X 1/2 | 8 |
| | 1200453 | SCREW (SECURITY OPTION) | 8 |
| 24 | 1200075 | WASHER, 1/4 I.D. | 8 |
| 25 | 1033326 | TRANSFORMER, 440 V | 1 |
| 26 | 7100005 | STARTER, 220-240V, 50HZ, 3PH | 1 |
| | 7100006 | STARTER, 208-240V, 60HZ 3PH | 1 |
| | 7100007 | STARTER, 380V, 50HZ, 3PH, 460V, 60HZ, 3PH | 1 |
| | 7100008 | STARTER, 220-240 V, 50HZ, 1PH | 1 |
| | 7100009 | STARTER, 208-240 V, 60HZ, 1PH | 1 |
| | 7100114 | STARTER, 200V, 50/60HZ, 3PH | I |
| 27 | 7100010 | BRACKET, DIN RAIL | 1 |
| 28 | 4400350 | LABEL, SPEED INDICATOR-SRM60+ | 1 |
| | 4400336 | LABEL, SPEED INDICATOR-SRM80+ | 1 |
| 29 | 1064453 | PANEL, REINFORCEMENT | 1 |
| 30 | 4400005 | LOCK WASHER 1/4 | 4 |
| 31 | 1200328 | SCREW, HEX HD 1/4-20 X 5/16 | 4 |
| 32 | 7100101 | SWITCH, PUSH BUTTON, START | 1 |
| 33 | 7100102 | SWITCH, PUSH BUTTON, STOP | 1 |
| 34 | 4400311 | LABEL, START/STOP/TIMER | 1 |
| 35 | 4400015 | NUT, KEP 3/8-16 | 4 |
| 36 | 1200331 | WASHER, 3/8 | 8 |
| 37 | 1064461 | MOUNT, MOTOR, 3/8 ID | 8 |
| 38 | 1064460 | ISOLATOR, MOTOR, 3/8 ID | 4 |
| | | | |

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| 39 | 1200330 | BOLT, MOTOR MOUNT 3/8-16 X 4-1/2 | 4 |
|----|---------|----------------------------------|---|
| 40 | 8800053 | PLUG, BOWL LIFT SWITCH | 1 |
| 41 | 1012442 | BRACKET, LOWER | 2 |
| 42 | 7100123 | SWITCH, GUARD | 2 |
| 43 | 1200450 | TOOL KIT (SECURITY OPTION) | 1 |

HOUSING ASSEMBLY FIGURE 10



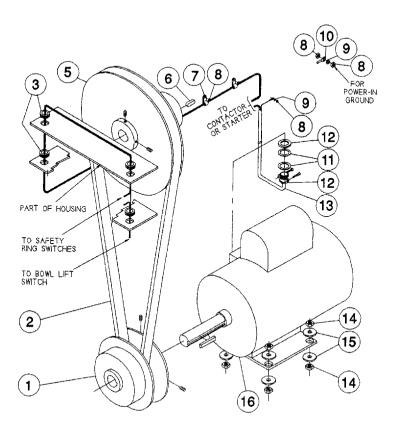
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DRIVE ASSEMBLY FIGURE 11

| ILLUS. NO. | PART_NO. | <u>DESCRIPTION</u> Q | TY. |
|--------------|----------|---|-----|
| 1 | 1064504 | PULLEY, VARIABLE, MOTOR (COMES WITH (2) 5/16-18X3/8 SET SCREWS) | 1 |
| 2 | 1064505 | BELT, VARIABLE-SRM60+ | 1 |
| - | 1080035 | BELT, VARIABLE-SRM80+ | 1 |
| 3 | 4400214 | BUSHING, HEYCO | 4 |
| 4 | | RESERVED | ' |
| 5 | 1064503 | PULLEY, VARIABLE, INPUT (COMES WITH (2) | |
| - | 200.200 | 5/16-18X3/8 SET SCREWS) | 1 |
| 6 | 4400231 | KEY, 1/4 SO, X 1 | 1 |
| 7 | 4400101 | CLAMP, CORD | 2 |
| 8 | 1200060 | NUT, HEX #10-32 | 5 |
| 9 | 4400065 | WASHER, LOCK #10 | 2 |
| 10 | 1061967 | RING, TERMINAL, #10, 12 GAUGE | 1 |
| 11 | 4400402 | WASHER, CABLE CONNECTOR | 2 |
| 12 | 4400401 | CONNECTOR, CABLE, 3/8 | 1 |
| 13 | 8800206 | CORD, MOTOR, 1 PHASE | 1 |
| | 8800207 | CORD, MOTOR, 3 PHASE | 1 |
| 14 | 4400015 | NUT, KEP 3/8-16 | 8 |
| 15 | 4400127 | WASHER, 3/8 | 8 |
| 16 * | 1064520 | MOTOR, 208-240V, 60HZ, 1 PH | 1 |
| * | 1064521 | MOTOR, 220-240V, 50HZ, 1 PH | 1 |
| * | 1064522 | MOTOR, 208-240/460V, 60HZ, 3 PH | 1 |
| * | 1064523 | MOTOR, 220/380/440 V, 50 HZ, 3 PH | 1 |
| * | 1064524 | MOTOR, 200V, 50/60HZ, 3PH | 1 |
| 17 | 1061973 | WIRE NUT (NOT SHOWN) 1PH, 3PH LOW VOLT | Γ 4 |
| | | 3PH HIGH VOLT | 6 |
| 18 | 8800230 | CORD, POWER, 230 V, 50 HZ, 1PH | |
| | | (CE & BRITISH) (NOT SHOWN) | 1 |
| | 8800231 | CORD, POWER, 400 V, 50 HZ, 1PH | |
| | | (CE & BRITISH) (NOT SHOWN) | 1 |
| 19 | 8800098 | PLUG, POWER 1 PH (EUROPE) (NOT SHOWN) | 1 |
| 20 | 7100107 | STRAIN RELIEF (EUROPE) (NOT SHOWN) | 1 |

^{*} INCLUDES 1/4 SQ. X 2 KEY

DRIVE ASSEMBLY FIGURE 11

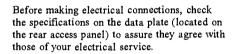


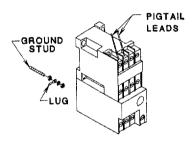
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ELECTRICAL CONNECTIONS

Electrical connections should be made my qualified workmen who will observe all applicable safety codes and the National Electrical Code.

SINGLE PHASE

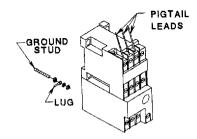




WARNING: DISCONNECT ELECTRICAL POWER SUPPLY AT THE MAIN CIRCUIT BOX AND PLACE A TAG INDICATING THE CIRCUIT IS BEING WORKED ON.

THREE PHASE

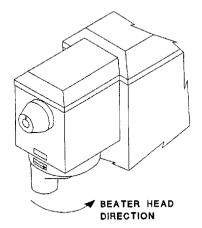
A hole of 1/2" conduit is located in the left surface of the housing in the rear uppermost location. Connect the input power leads to the pigtail leads for the motor controller. A solder less lug is provided for the service ground lead. Secure service ground to the grounding stud located to the left of the conduit hole.



Three-phase machines must be connected so the beater head (planetary) turns in the direction of the arrow (left to right). To check the direction of rotation, turn the power disconnect switch "ON". Place timer on "HOLD". Energize machine momentarily by pushing "START" then "STOP" and verify the direction of rotation.

MIXER ROTATION

WARNING: DISCONNECT
ELECTRICAL POWER SUPPLY AT THE
FUSED DISCONNECT SWITCH AND
PLACE A TAG INDICATING THE
CIRCUIT IS BEING WORKED ON.

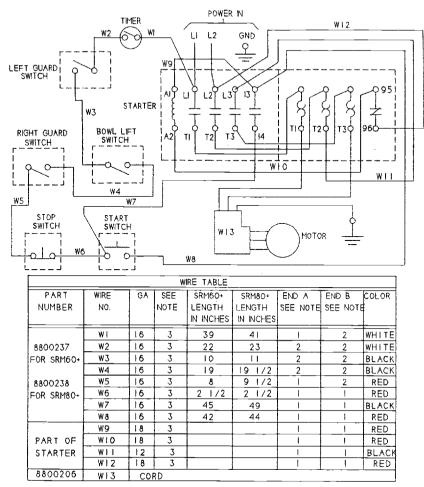


If motor rotation is incorrect, interchange any two of the power supply leads.

NOTE: It is not necessary to remove the top cover of the mixer in order to perform the electrical installation. Only the rear access panel (Fig. 10 [22]) need be removed.

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<u>WIRING DIAGRAM</u> (208-240V, 60HZ, 1PH) (220-240V, 50HZ, 1PH) Figure 12A



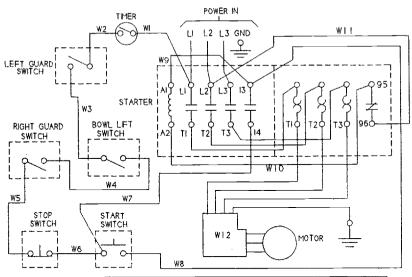
NOTES: I. ATTACH DOUBLE CRIMP FERRULE

- ATTACH DOUBLE CRIMP 1/4" FEMALE QUICK DISCONNECT FULLY INSULATED.
- 3. MATERIAL: 1015 TEW CSA AND UL APPROVED.

IMPORTANT: Before making electrical connections, check the specifications on the data plate (located on the rear access panel) to assure they agree with those of your electrical service.

WARNING: Whenever maintenance is being performed, or whenever the top cover or rear access panel have been removed, DISCONNECT electrical cord and place a tag on it indicating the mixer is being worked on.

WIRING DIAGRAM (208-240V, 60HZ, 3PH) (220V, 50HZ, 3PH) (200V, 50/60HZ, 3PH) Figure 12B



| | WIRE TABLE | | | | | | | |
|------------|------------|-----|------|-----------|-----------|----------|----------|-------|
| PART | WIRE | GA | SEE | SRM60+ | SRM80+ | END A | END B | COLOR |
| NUMBER | NO. | | NOTE | LEHGTH | LENGTH | SEE NOTE | SEE NOTE | |
| | | | | IN INCHES | IN INDHES | | | |
| | WI | 16 | 3 | 39 | 41 | 1 | 2 | WHITE |
| 8800237 | W2 | 16 | 3 | 22 | 23 | 2 | 2 | WHITE |
| FOR SRM60+ | W3 | 16 | 3 | 10 | - 11 | 2 . | 2 | BLACK |
| | W4 | 16 | 3 | 19 | 19 1/2 | 2 | 2 | BLACK |
| | W5 | 16 | 3 | 8 | 9 1/2 | 1 | _2 | RED |
| 8800238 | W6 | 16 | 3 | 2 2/2 | 2 1/2 | 1 | | RED |
| FOR SRM80+ | W7 | 16 | 3 | 45 | 49 | I | | BLACK |
| | W8 | 16 | 3 | 42 | 44 | 1. | | RED |
| PART | W9 | 18 | 3 | | | | I | RED |
| 0F | WIO | 18 | 3 | | |) | 1 | RED |
| STARTER | WII | 18 | 3 | | | | | RED |
| 8800207 | W12 | COF | ₹D | | | | | |

NOTES: 1. ATTACH DOUBLE CRIMP FERRULE.

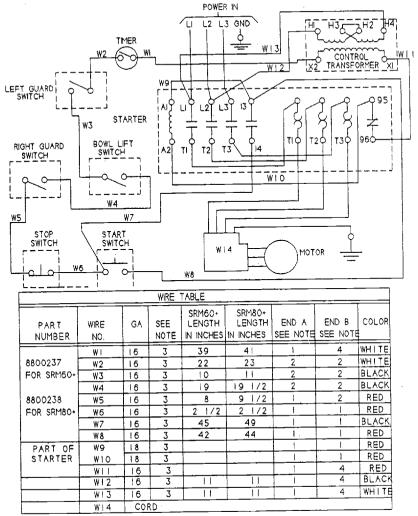
ATTACH DOUBLE CRIMP 1/4" FEMALE QUICK DISCONNECT FULLY INSULATED.

3. MATERIAL: 1015 TEW CSA AND UL APPROVED.

IMPORTANT: Before making electrical connections, check the specifications on the data plate (located on the rear access panel) to assure they agree with those of your electrical service.

<u>WARNING:</u> Whenever maintenance is being performed, or whenever the top cover of rear access panel have been removed, DISCONNECT electrical cord and place a tag on it indicating the mixer is being worked on.

WIRING DIAGRAM (460V, 60HZ, 3PH) (380V, 50HZ, 3PH) Figure 12C



NOTES: 1. ATTACH DOUBLE CRIMP FERRULE.

- ATTACH DOUBLE CRIMP 1/4" FEMALE QUICK DISCONNECT FULLY INSULATED.
- 3. MATÉRIAL: 1015 TEW CSA AND UL APPROVED.
- 4. NO. 10 RING TERMINAL. AMP 60772-1

IMPORTANT: Before making electrical connections, check the specifications on the data plate (located on the rear access panel) to assure they agree with those of your electrical service.

<u>WARNING:</u> Whenever maintenance is being performed, or whenever the top cover or rear access panel have been removed, DISCONNECT electrical cord and place a tag on it indicating the mixer is being worked on.